USGS
science for a changing world

Center for Integration of Natural Disaster Information

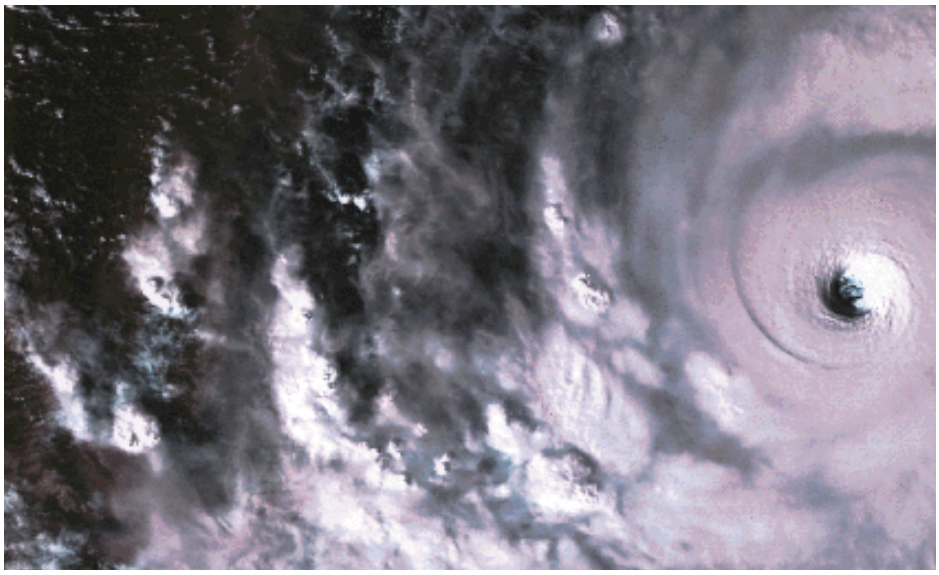
Disasters cost the United States more than $1 billion per week in economic losses. According to the National Science and Technology Council's December 1996 report, *Natural Disaster Reduction: A Plan for the Nation*, "no single source exists for the broad range of information needed for natural disaster reduction, nor are there aids to help integrate information from diverse sources."

Responding to disasters has become more critical as populations are increasing rapidly in high-risk hazardous areas. For example, with explosive growth in coastal development, more people and their property are at risk from hurricanes and tsunamis. Although the number of deaths due to hurricane hazards has decreased because of early warning systems, property damage in the 1990's amounted to more than damages from the 1970's and 1980's combined.

Minimizing loss of life and property, as well as reducing economic losses, reinforces the critical need for new and emerging information technologies to improve the near-real-time collection, integration, and delivery of natural hazards information. These risks can be reduced if people take well-informed actions before a disaster and make appropriate responses when a disaster occurs.

The U.S. Geological Survey (USGS) monitors and evaluates threats from natural hazards and has monitoring networks and analytical facilities to support this mission, including a global earthquake network, a national stream-flow monitoring program, regional volcano observatories, and long-standing interagency partnerships in disaster mitigation and response.

The USGS's Center for Integration of Natural Disaster Information (CINDI) is a research facility for (1) developing and evaluating technology for information integration and dissemination, (2) performing research in data integration, analysis, modeling, and decision support, and (3) supporting the ongoing evolution of the USGS processing and delivery of hazards data.



Hurricane Mitch was the most destructive hurricane in the history of the western hemisphere. From Oct. 27 through Nov. 1, 1998, it battered the Caribbean coast and parts of Honduras, Nicaragua, El Salvador, and Guatemala, in Central America. In response to this disaster, the CINDI has produced an atlas of more than 40 map layers that can be combined to generate custom maps of the affected area. This atlas can be viewed online at http://cindi.usgs.gov.

Priorities for the data integration research activities of the CINDI include processing near-real-time data from multiple sources (such as instrument networks, derived products from classified sources, public satellite data, and standard USGS information products) and using data that cover the entire Nation. Research results are used in the development of applications and tools that will help citizens, local and State officials, and Federal managers use scientific observations to make well-informed decisions.

For additional information, contact:

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USGS Information

As the Nation's largest water, earth, and biological science and civilian mapping agency, the USGS works in cooperation with more than 2,000 organizations across the country to provide reliable, impartial scientific information to resource managers, planners, and other customers. This information is gathered in every State by USGS scientists to minimize the loss of life and property from natural disasters, contribute to the sound conservation, economic, and physical development of the Nation's natural resources, and enhance the quality of life by monitoring water, biological, energy, and mineral resources.

For information on these and other USGS products and services, call 1-888-ASK-USGS, use the Ask.USGS fax service, which is available 24 hours a day at 703-648-4888, or visit the general interest publications Web site on mapping, geography, and related topics at mapping.usgs.gov/mac/isb/pubs/pubslists/index.html.

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